



UNITED STATES PATENT AND TRADEMARK OFFICE

ck
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,867	11/27/2000	Maria Grazia Pau	4626US	4248
24247	7590	04/18/2007		
TRASK BRITT			EXAMINER	
P.O. BOX 2550			HILL, MYRON G	
SALT LAKE CITY, UT 84110				
			ART UNIT	PAPER NUMBER
			1648	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/722,867

Applicant(s)

PAU ET AL.

Examiner

Myron G. Hill

Art Unit

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36,38-40,42-45 and 50-52 is/are pending in the application.
- 4a) Of the above claim(s) 36,38,39,45 and 52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40,42-44,50 and 51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the paper filed 2/6/07.

Claims 40, 42-44 and 46-51 are under consideration.

Rejections Maintained

Claim Rejections - 35 USC § 103

Claims 40, 42-44, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over and Merton *et al.* and Paul *et al.* in view of Trudel *et al.*

The claims are drawn to a method of concentrating cell cleared influenza virus containing supernatant under low shear conditions using ultrafiltration. The dependent claims add cutoff values for the ultrafiltration.

Applicant argues that there is no motivation to combine, that Trudel *et al.* do not fix the problems of the other cited art of the low infectivity taught by Paul *et al.*, that the teachings of Paul *et al.* do not supply the motivation to purify the influenza virus of Merton *et al.*, that Trudel *et al.* teach only for "labile enveloped virus" and the examiner has not provided any proof that influenza is such a virus, that the later reference shows the problems known to Paul *et al.* that were not known to Trudel *et al.*, that there is no expectation of success, and that the references do not teach each and every element of the claims.

Applicant's arguments have been fully considered and not found persuasive.

Art Unit: 1648

First, the claims do not require a specific amount of infectivity, they require concentrating the virus. The claims only recite in the preamble that the virus "is or can be made infectious" without any specific limitation on the percent infectivity and this refers to the input virus, not the concentrated virus product.

It is well known to the person of ordinary skill in the art that influenza is an enveloped virus. A reference stating such can be supplied if required.

One of ordinary skill in the art at the time of invention would be motivated to purify large scale volumes of influenza as needed by Merton *et al.* with the method of Trudel *et al.* because the virus needs to be concentrated and they both use enveloped viruses.

While Trudel *et al.* does not teach 750kD cutoff for filter membrane, Trudel *et al.*, as noted before, teach that pore size can be chosen for maximum flow rate (page 2, column 1, lower part). One of ordinary skill in the art would be able to choose pore size based on sizes manufactured at the time of invention using the factors taught by Trudel *et al.* of virus purification and flow rate.

In response to applicant's argument based upon the age of the references and that Paul *et al.* shows problems with the method of Trudel *et al.*, one of ordinary skill in the art at the time of invention would have known that each used different viruses and that the teachings of Paul *et al.* do not negate the findings of Trudel *et al.* Thus, the findings of Trudel *et al.* are not changed by the findings of the later published art.

Thus, the rejection is maintained.

Conclusion

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Myron G. Hill whose telephone number is 571-272-0901. The examiner can normally be reached on 8:30 am-5 pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1648

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Myron G. Hill
Patent Examiner
20 February 2006



BRUCE R. CAMPPELL, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600